

**TABLE V-8. MORBIDITY EFFECTS ESTIMATES PER INCREMENTS<sup>a</sup> IN ANNUAL MEAN LEVELS OF FINE/THORACIC PARTICLE INDICATORS FROM U.S. AND CANADIAN STUDIES** (After CD, Table 13-5).

Type of Health Effect & Location	Indicator	Change in Health Indicator per Increment in PM <sup>a</sup>	Range of City PM Levels Means ( $\mu\text{g}/\text{m}^3$ )
Increased bronchitis in children		Odds Ratio (95% CI)	
Six City <sup>d</sup>	PM <sub>15/10</sub>	3.26 (1.13, 10.28)	20-59
Six City <sup>e</sup>	TSP	2.80 (1.17, 7.03)	39-114
24 City <sup>f</sup>	H <sup>+</sup>	2.65 (1.22, 5.74)	6.2-41.0
24 City <sup>f</sup>	SO <sub>4</sub> <sup>=</sup>	3.02 (1.28, 7.03)	18.1-67.3
24 City <sup>f</sup>	PM <sub>2.1</sub>	1.97 (0.85, 4.51)	9.1-17.3
24 City <sup>f</sup>	PM <sub>10</sub>	3.29 (0.81, 13.62)	22.0-28.6
Southern California <sup>g</sup>	SO <sub>4</sub> <sup>=</sup>	1.39 (0.99, 1.92)	—
Decreased lung function in children			
Six City <sup>d,h</sup>	PM <sub>15/10</sub>	NS Changes	20-59
Six City <sup>e</sup>	TSP	NS Changes	39-114
24 City <sup>i,j</sup>	H <sup>+</sup> (52 nmol/m <sup>3</sup> )	-3.45% (-4.87, -2.01) FVC	—
24 City <sup>i</sup>	PM <sub>2.1</sub> (15 $\mu\text{g}/\text{m}^3$ )	-3.21% (-4.98, -1.41) FVC	—
24 City <sup>i</sup>	SO <sub>4</sub> <sup>=</sup> (7 $\mu\text{g}/\text{m}^3$ )	-3.06% (-4.50, -1.60) FVC	—
24 City <sup>i</sup>	PM <sub>10</sub> (17 $\mu\text{g}/\text{m}^3$ )	-2.42% (-4.30, -0.51) FVC	—

<sup>a</sup>Estimates calculated annual-average PM increments assume: a 100  $\mu\text{g}/\text{m}^3$  increase for TSP; a 50  $\mu\text{g}/\text{m}^3$  increase for PM<sub>10</sub> and PM<sub>15</sub>; a 25  $\mu\text{g}/\text{m}^3$  increase for PM<sub>2.5</sub>; and a 15  $\mu\text{g}/\text{m}^3$  increase for SO<sub>4</sub><sup>=</sup>, except where noted otherwise; a 100 nmol/m<sup>3</sup> increase for H<sup>+</sup>.

<sup>d</sup>Dockery et al. (1989)

<sup>e</sup>Ware et al. (1986)

<sup>f</sup>Dockery et al. (1996)

<sup>g</sup>Abbey et al. (1995a,b,c)

<sup>h</sup>NS Changes = No significant changes.

<sup>i</sup>Raizenne et al. (1996)

<sup>j</sup>Pollutant data same as for Dockery et al. (1996)